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Analysis of a merger in the software industry, case Nordic Solutions & Ravensoft

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Abstract

Mergers and acquisitions have been studied extensively, the reasons for them and how well they perform, but the studies have often focused on large public companies. The goal of this study was to find out if the reasons for mergers are the same for small companies in the software industry, as they are for large companies, and how well these mergers perform. To answer these questions I studied a merger between two small, privately owned Finnish software companies. This study was conducted as a case study, for which I collected data from semi-structured interviews, various presentations, annual reports and surveys. The interviews were done with the management and board members of the companies, which were also the largest shareholders, and all interviews were recorded and transcribed.

I found that the reasons for mergers are largely the same for small companies as for larger ones, with the notable difference that small, privately owned companies do not take part in mergers due to management hubris or empire building, as the management is typically the largest shareholders, and as such, do not want to work against the best interest of the shareholders.

In this particular case, the merger was ultimately a success, due to the careful selection of the target by the acquirer, although a portion of the merger potential was lost due to insufficient merger execution planning.

Keywords Merger, acquisition, M&A, software industry, private company

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Abstrakt

Det har forskats mycket kring företagsförvärv och fusioner, både om vad orsakerna är för företag att fusioneras, och hur bra resultat fusionerna ger. Största delen av undersökningarna har dock fokuserat enbart på stora publika aktiebolag. Syftet med detta arbete var att undersöka ifall orsakerna för fusioner är de samma för små företag i mjukvaruindustrin, som för stora företag, samt hur bra resultat dessa fusioner ger. För att få svar på dessa frågor har jag studerat en fusion mellan två privatägda små mjukvaruföretag i Finland. Jag genomförde studien som en fallstudie där jag samlade in information genom semi-strukturerade intervjuer, olika presentationsdokument, bokslut samt frågeformulär. Intervjuerna gjordes med ledningen och styrelsen för de båda företagen, dessa utgjorde tillika de största aktieägarna. Alla intervjuer spelades in och transkriberades för analys.

Det visade sig att orsakerna till fusion är till stora delar de samma för små företag som för stora, med den skillnaden att små privatägda företag inte deltar i fusioner på grund av ledningens hybris eller för att företagsledningen vill öka sin egen makt. Detta beror på att ledningen vanligen också är de största aktieägarna och därmed inte vill verka mot aktieägarnas intressen.

I detta fall lyckades fusionen, till stor del på grund av att valet av förvärvsobjekt var lyckat. En del av potentialen i fusionen förlorades dock i och med att utförandet av fusionen inte var tillräckligt bra planerad.

Nyckelord Samgående, förvärv, fusion, mjukvaruindustri, privata bolag

Språk Engelska

Preface

This thesis took form in the course of many years, and I would like to thank all the persons that helped me finish it.

First, I would like to thank my supervisor, Professor Matti Hämäläinen, for helping me clarify the goals of the study and advising on research methods. I would also like to thank my instructor Marko Voutilainen for bringing up interesting angles of the merger and guiding me in the right direction.

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I want to thank my parents, Ingolf and Birgitta, whom have supported and encouraged me in every way possible throughout my studies.

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1 Introduction

This chapter details the motivation for this case study and the objectives for it; it also explains the selection of companies for this case study and describes how the data was collected.

1.1 Background

Mergers and acquisitions have long been a very interesting research topic and a lot of studies have been conducted on the reasons for them, how they should be executed and how successful they are. The vast majority of the studies have focused on large, public companies where the acquisitions have valuations of hundreds of millions, or billions, of dollars or euros. A substantial number of all mergers and acquisitions (M&A's) are, however, done by small and medium sized companies that are privately owned. As the owner base and resources of a small company differs substantially from a large company, one cannot directly apply the results acquired from studies of large company mergers on small and medium sized companies. The differences between privately held and public companies are also quite large and these also affect M&A behavior.

Research on mergers and acquisitions have often focused on how successful they are, and on the problems that arise when trying to capture the sought after benefits of the merger. Almost all of the potential problems a merger can face have to do with employee satisfaction; if the people working at the merging companies are not happy with the merger, it is not very likely that the merger will be a success. While employee satisfaction is a big deal in all mergers, it is tremendously important in a merger where the companies' core assets are the knowledge their employees possess. In companies working in traditional industries a very large portion of the company's value lies in its production facilities and distribution channels, and it is usually these an acquiring company is buying. For a small software company that does not have a strong brand name or products with a strong lock-in effect, the only value of the company

stems from its employees. If these employees are dissatisfied with the merger and choose to quit it might very well lead to the collapse of the company.

With these special considerations in mind, the research questions this study seeks to answer are:

- What are the reasons for small software companies to merge?
- How well is the desired merger results achieved?

1.2 Research methods

The study was conducted as a case study on the merger of Nordic Solutions Oy and Ravensoft Oy, which were both privately held small companies in the software industry. According to (Gillham, 2000a) a case is:

- a unit of human activity embedded in the real world;
- which can only be studied or understood in context;
- which exists in the here and now;
- that merges with its context so that precise boundaries are difficult to draw.

Gillham states that a case study investigates a case to answer specific questions by using different kinds of evidence because no single source of evidence is likely to be sufficient on its own. The use of several different evidence sources is a key characteristic of a case study; another distinguishable feature is that you do not start out with predefined theories which you seek to prove or disprove, because until you have examined the data you do not know what theories will work best. (Bryman, 2007) also mentions the usage of multiple sources of evidence as an advantage of case studies when it comes to acquiring a better understanding of a phenomenon.

In a guide aimed at helping researchers construct questionnaires, Gillham discusses different ways of collecting verbal data from people, placed on a structured-unstructured scale ranging from just listening to other people talk in the unstructured end to having people fill out structured questionnaires in the structured end. While structured questionnaires are an easy way to get data

from many people that is fairly easy to analyze, it seldom is enough to base the whole case study on, and other research methods must supplement this. In the middle of the structured-unstructured scale lies semi structured and open-ended interviews, with which you can get more detailed and in-depth data, but at a much higher cost in the sense of time spent on collecting data as well as analyzing it, compared to using questionnaires. (Gillham, 2008)

Another guide by Gillham focuses on doing research interviews, in which he details everything from how the interviewer should sit while interviewing to how to summarize and write up ones findings. It is very important to transcribe all of the interviews, if it is only possible. This helps lessen the risk of interviewer bias, in which the person interviewing tends to remember and emphasize the answers he or she was hoping for. The drawback with transcribing interviews is that it takes a lot of time; therefore one should either try to limit the length of each interview, or limit the number of interviews done. One special category of interviews is the “elite” interview, in which the interviewee is an expert in his or her field and usually also in a position of power. These types of interviewees have a great deal of important knowledge, and might also know how which questions you should be asking and how to categorize your answers. Elite interviewees can be very important for your research. (Gillham, 2000b)

The case study method was chosen as it enabled me to get detailed data on this specific merger. The data was collected at the merged company Nordic Solutions Oy (later Attido Oy), where I worked. As (Stake, 1995), points out, one single case study is rarely the most representative case for other cases, but he also states that sometimes the researcher’s choice of case companies can be limited and therefore the researcher must choose a company to which he or she has access to, by, for example, working there.

Most of the data collected was gathered by interviewing the shareholders of both merging companies, which were also working for the company, or a member of the board. The interviews were conducted between December 2012

and May 2013 and they were recorded and transcribed. Because these interviews were done two years after the merger of the companies there might have been some recall bias in the reasons and goals for the merger, and consequently, the actual results may be stated as original goals for the merger. However, one preliminary interview with the CEO of Nordic Solutions was done before the actual merger (but after the merger deal was made) and some early presentation documents also exists which provides reliable data on the stated intentions at the time of the merger.

I used semi structured interviews which means that I had prepared interview guides beforehand, but that during the interviews I sometimes had to change the order or phrasing of the questions depending on the answers given by the interviewee. The interview guides I used were written in Finnish, and the interviews were conducted in the respondent's mother tongue, which was Swedish in one case, and in the other cases Finnish. The interviewees were chosen so that for each company, the interviewed people represented over 50% of the shares in the company. In Ravensoft's case they represented about 66% of the shares, and in Nordic Solutions case they represented about 70% of the shares. As some of the shareholders at the time of the merger were no longer working at the company, and all of the shareholders had very busy schedules, it was not possible with reasonable effort to interview all of them. By focusing on the largest shareholders I could ensure that I captured the opinions of the most influential persons, which, at the same time, where the people that had the most to win or lose from the merger. The interviewed persons owned 72% of the merged company, and worked in four different management layers, which make them representative for the company as well as for the owners of the company. The respondents answered most of the questions, but details about the merger deal and payment were not given.

The people I interviewed held the following positions in the companies:

- Antti Piippo, chairman of the board, Nordic Solutions
- Pasi Matsi, CEO, Nordic Solutions

- Marko Voutilanen, executive vice president, Nordic Solutions
- Jari Laurila, CEO, Ravensoft
- Patrik Rosqvist, manager, Ravensoft

Aside from the interviews and presentations, numeric data was gathered by studying the annual reports of the companies as well as charts presenting the revenue per customer. In the year following the merger, there were also some questions in the yearly employee satisfaction survey regarding the merger on how the employees felt that the merger had been conducted and if they felt that they belonged to the same company.

As the purchase deed for the merger was confidential, I was not able to use it as a source of information for the case.

2 Theoretical background

In this chapter I review some of the previous research in the mergers and acquisitions field; why they are done, how researchers have tried to measure their results, and what the most common pitfalls are when merging two companies.

2.1 Reasons for mergers

Mergers and acquisitions are carried out for a variety of reasons. According to (Trautwein, 1990) there are seven different theories about why mergers occur.

Efficiency theory considers the reason for mergers to be the desire to achieve synergies by combining the resources of the two merging entities. The types of synergies that are usually hoped to be gained are financial synergies, operational synergies and managerial synergies.

Monopoly theory assumes the mergers aim is to create more market power. One possibility is that the firm can use earnings from one product to sustain a less profitable one while fighting for market shares. Another possibility is that the firm can compete against a competitor on several markets simultaneously after a merger. The firm can also try to deter possible competitors from entering its market by a concentric acquisition.

Valuation theory suggests that mergers are carried out when managers of the acquiring firm have better information on the targets value than the market. The bidder then aims to capitalize on this private knowledge after the merger.

Empire building theory also focuses on the managers of the bidding company. This theory, however, assumes that managers do not necessarily act in the best interest of their shareholders, but instead plan mergers to maximize their own influence.

Process theory describes mergers not as results of rational choices, but as outcomes of processes influenced by organizational routines, political games or

by the limited processing powers of individuals. This theory is, however, only rudimentarily developed.

A sixth theory is the raider theory which hypothesizes that the raider who buys the company transfers value from the acquired company and its shareholders to himself and his company. According to Trautwein, the evidence on shareholders gains does not support this theory.

The last of Trautwein's theories is called the disturbance theory. According to it, mergers happen in waves which are caused by economic disturbances that change the valuations of assets among owners and non-owners. This causes the owners to sell their companies and non-owners to acquire them.

(Berkovitch & Narayanan, 1993) name three major motives for mergers: the synergy motive, the agency motive, and hubris. Of these three the first two are also discussed by Trautwein. The third motive, the hubris motive, resembles Trautwein's process theory in that they both assume that managers are unable to correctly assess the possible benefits of mergers, and therefore they do not make rational decisions. Even so, the hubris theory only focuses on one outcome of bad information or bad decision making and the overestimation of synergy gains. Berkovitch and Narayanan also suggest that management only engage in takeovers when it overestimates synergy gains. If synergy gains are underestimated but still considered enough to accomplish the takeover I see no reason why management would not conduct the takeover.

(Kreidl & J.Oberndorfer, 2004) have studied merger reasons for a specific type of companies, namely engineering consulting firms. As Kreidl and Oberndorfer state, engineering consulting firms are characterized by their emphasis on highly skilled personnel instead of machinery and equipment, and by their orientation towards projects. These characteristics also fit the software industry very well and therefore I think that the results Kreidl and Oberndorfer have acquired also can be applied to mergers in the software industry. In their study, Kreidl and Oberndorfer acknowledge the efficiency theory, the monopoly theory and the hubris theory from previous literature. They also mention that (McCann, 1996)

found that professional service firms ranked the acquisition of expert talent as a very important motive for mergers.

Kreidl and Oberndorfer found that the most important reason for M&A's for engineering consulting firms was the penetration of new service/client markets. The second most important reason was increasing market share, or market power. Having a larger market share means that the project oriented company has more references and a higher availability of professionals for future project and thus it can better compete for new projects. A large market share also brings cost reduction because of increased efficiency in the design process that comes from experience. A stronger market power also provides the company with a reputation for its expertise.

Other important merger motives were the acceleration of the firm's growth and the acquisition of expert talent. Increasing firm size can also help retain expert talent as a larger firm creates the possibilities to promote junior managers. For a small company the acquisition of experts can be a very important reason for a merger as it can be very difficult to recruit specialists if the company name is not known.

2.2 Mergers in the IT industry

(Leger, 2009) has studied how the merging companies' product portfolios affect the post-merger performance. His study focused on how product portfolio complementarity and compatibility affected short-term market performance, transaction value, and the new entity's financial performance after the merger. Product portfolio complementarity is defined as how well the two firms' products joint use adds more value for the customer than the separate use of the same products. Software compatibility is the degree of how well programs can work together and share data.

Leger found that a higher degree of product portfolio compatibility increases short-term market performance, transaction value, and the new entity's

financial performance of the merger. Product portfolio complementarity, on the other hand, does not affect the above mentioned measurements positively. For transaction value the results for portfolio complementarity were inconclusive, but both financial performance and short-term market performance seems to be negatively affected by a high degree of product portfolio complementarity.

Leger states that the most important finding in his study is the positive influence product portfolio compatibility has on merger results. This means that it is very important to consider the technologies used in the acquiring and the target company when evaluating a possible merger.

In an article discussing three case-studies on software company mergers (Ahonen, 2006) examined the reasons for the mergers in each of the cases. In two cases the most important reason for the acquisition was to strengthen the product portfolio of the acquiring company. In one case the acquired company was the technology leader in its field and in the other the acquired company had products that were sold as part of the systems provided by the acquiring company. In the third case the main rationale for buying the target was getting rid of competition and acquiring the customer base of the target company.

2.3 Merger performance

2.3.1 Measuring merger performance

A lot of the studies on mergers and acquisitions have focused on the performance and profitability of mergers. Studies have tried to answer the questions of whether mergers create overall value and whether mergers create value to the acquirer. To answer these questions several different metrics have been used. The most commonly used metric is to compare changes in stock prices both for the acquiring company and the target company. This method has an advantage in that the data required for analyses is easily available, and it is also a less biased method compared to methods requiring interviews (Lubatkin, 1987). In a comparison study, (Schoenberg, 2006) has compared the results

gained from four different metrics. These were: cumulative abnormal returns (CAR), managers' assessments, divestment data and expert informants' assessments. Independently each of these metrics suggests that about 50 % of all mergers are successful. When comparing performance data generated from the different metrics of the same cases positive correlation could only be found between managers' and expert informants' assessments. A single merger could thus be considered both failed and successful depending on the metrics used.

To overcome the previously mentioned problem Schoenberg suggests using multiple measures to determine if a merger is successful. In addition to the four previously mentioned metrics he also considers long-term accounting measures for evaluating merger success. One such measure is ROA (Return On Assets) that (Hitt, Harrison, Ireland, & Best, 1998) uses in their study of the attributes of successful and unsuccessful mergers. Papadakis and Thanos (Papadakis, 2010) have later tried to replicate and extend Schoenberg's study in a different geographical setting. They compared the results for merger performance gained by one stock based metric, CAR, one accounting based metric, ROA, and one perceived performance based metric, manager's subjective assessments. Their results were similar to Schoenberg's in the sense that they found no correlation between the results from the different metrics.

2.3.2 Acquirer returns

It is often stated that the majority of mergers fail to achieve the desired results. This statement is based on the fact that earlier research on whether mergers create value has concluded that mergers more often than not do not result in positive long-term performance for the acquirer (Agrawal & Jaffe, 2000). The study conducted by (Franks, 1991) is mentioned as a milestone in M&A literature because of their new measurement techniques. Although they did not find that mergers cause negative returns to the acquirer, Agrawal and Jaffe found that all the research after Franks' showed acquirer under-performance after mergers. More recent studies have, however, suggested that acquirers do not overpay when buying targets. Such results have been found by (Bhagat, 2005) using new methods for estimating value improvements. (Fuller, 2002) also

found evidence of positive acquirer returns when examining firms that acquired five or more public and non-public targets within a short time period.

In their study, Fuller et. al. studied how the type of the target firm (public, private or subsidiary) affected the acquirers gains and also how the payment type (stock, cash or mixed) affected the returns. Fuller et. al. found out that acquirers of private firms and subsidiaries on average fare better than acquirers of public firms. One reason for this is that bidders receive a better price due to the lack of liquidity of an investment in a subsidiary or in a private firm. There are also two other important factors that can affect the returns to the acquirer of a private firm positively. Because a private firm by definition is owned by only a few persons or even a single person there is a considerable chance that if the acquisition is paid with stock and the acquired firm's size is comparable to the acquiring firm a large new blockholder will be created. A new large blockholder allows greater monitoring of the acquirer's management which increases the value of the acquirer. Acquiring a private firm with stock also has another positive influence on the bidder's returns. If a private firm is bought with cash its owners face immediate tax implications but if they instead receive stock they can defer the tax. If this is valuable to them they might accept a discounted price for their firm. (Fuller, 2002)

In addition to using conventional methods for estimating abnormal stock returns, Bhagat et. al. have used two new methods. The first method is called the probability scaling method, the probability scaling method uses the returns associated with the bid announcement from a short time frame and scales the returns upward to account for the probability that the bid will fail. The other method is called the intervention method, this method captures stock returns associated with intervening events such as competing bids. By using these new methods in conjunction with conventional methods, Bhagat et. al. have found that acquirers on average pay a fair price for the shares in the target companies. The estimated value improvements are larger when competing bids are involved than in cases where there is only one bidder. (Bhagat, 2005)

Here it is worth noting that even though the study by Bhagat et. al. seems to show that more mergers are indeed successful than what was thought previously it is only a new interpretation of share prices. This means that investors have valued mergers more than previously thought which means that mergers are on average profitable for the acquirers' shareholders.

Capron and Shen studied the acquisitions of private vs. public targets and the returns to the acquirers. Overall it seems that acquirers profit more from buying private targets than from buying public targets. This is due to the fact that buying private companies is more risky than buying public ones because they lack a market price. Small private companies also have a more limited sample of potential acquirers. One particularly interesting finding was that it seems that acquiring firms that bought a public company fared better than if they would have bought a private company, and at the same time companies that bought private firms fared better than if they would have bought public firms. This can be explained by the fact that acquirers usually favor private targets when acquiring targets in their own industry and public targets when extending into more unknown industries. (Capron, 2007)

2.3.3 Target returns

Almost all of the research on target returns from mergers has indicated that the merger or acquisition target benefits from the transaction (Agrawal & Jaffe, 2000), (Campa, 2006), (Lubatkin, 1987). This is a result of the nature of an acquisition. If the shares in the target company are bought completely or partially with cash, the acquirer typically has to pay a premium over the target company's current share price to be able to acquire the shares. If, on the other hand, the acquisition is paid by stock in the acquiring company some of the sought after synergy gains are transferred to the owners of the target company.

The payment method used is dependent on several factors that affect the perceived returns to the acquiring company. Such factors are the status of the target company (public/private, small/large), the financial state of the acquiring company and the voting control of its dominant shareholder (Faccio & Masulis,

2005). Another factor that also affects the returns to the target is the amount of managerial ownership in the target company. The higher the degree of managerial ownership is, the higher the returns to the target are. This relationship was found by Baugess et al., they also found that outside ownership has a negative relation with target returns. The reasons for this are takeover anticipation caused by high managerial ownership and outsiders' willingness to share gains with the acquirer (Bauguess, 2009).

2.4 Merger challenges

There are several different ways for two companies to merge into one. Epstein differentiates between acquisitions, conglomerates and mergers. Acquisitions; where a significantly larger company buys a smaller one and assimilates it into its own organization, conglomerates; where a larger company owns several smaller ones without merging them together, and mergers; where two reasonably similarly sized companies come together and try to capture the best of the two companies to create a new, better company. According to Epstein mergers are much more difficult to do than the other two forms of acquisitions. (Epstein, 2004)

Epstein states that most previous studies did not differentiate between the reasons for merger failure, and while some mergers fail because the strategic vision, fit or deal structure are poor, others fail because the post-merger integration process was poorly designed and implemented. This latter category of failed mergers is mergers that should have succeeded and it is these mergers Epstein has studied.

Epstein identifies five key “drivers of successful post-merger integration”; integration strategy, integration team, communication, speed and aligned measurements, and states that failure on any of these can cause the merger to miss its goals. According to Epstein you must constantly emphasize that the merger is a merger of equals both in communication and in practice, and you must have an integration team consisting of members from both companies that

is backed by management. The integration must furthermore be carried out swiftly and measured against clearly defined and articulated measurements to verify that goals are being met.

Although Epstein focuses on large corporations in his study the main conclusion that a successful post-merger integration is crucial for the overall merger success is still relevant to all mergers of equals no matter the size of the companies merging.

3 Recommendations on mergers

This chapter focuses on the different recommendations on how mergers and acquisitions should be conducted based on the individual characteristics of each merger case.

3.1 Choosing targets

Makri et al. have studied how the degree of knowledge relatedness and technology complementarities of the target and the acquiring company affects the innovation rates and outcomes in mergers and acquisitions. According to Makri et al., earlier research by for example Cohen and Levinthal (Cohen & Levinthal, 1990), have found that a high degree of correlation between the buyers and the targets technological knowledge makes it easier to assimilate and commercially exploit the targets knowledge. However, if the correlation is too high it reduces the acquirer's possibility to learn from the target. (Makri, 2010)

Capron and Shen's study showed that acquirers prefer to buy private companies when they operate in the same business areas and public companies if they are acquiring in new business areas or if the target company has a high level of intangible assets. This stems from the fact that if the target company's assets are intangible or its business is new to the acquirer, it is much more difficult for the acquirer to assess the value of the target. Consequently, if the target is public, the acquirer at least knows what the market think the value of the target is. Capron and Shen also found that the acquirer's managers usually make the best decision possible within the constraints of the situation, and that a company that acquired a private firm fared better than if it had acquired a public firm, and vice versa. (Capron, 2007)

3.2 Merger advice based on merger types

Some authors give advice on mergers that applies to all mergers where integration is desired (Galpin, 2008). Others divide mergers into distinct types and give different merger recommendations on each of these types (Lind, 2004), (Bower, 2001). It is only when a merger is conducted to achieve lower capital costs or to satisfy managers' interests that no form of integration is necessary.

Lind and Stevens have based their merger recommendation on a matrix based on the degree of goodwill and company disparity of the merger. With this matrix they have identified four distinct merger types. If both the merger goodwill and company disparity is low they call the merger type Merge & grow. If disparity is low but the merger has a high goodwill the merger type is called Plan & prosper. A merger with high disparity and high goodwill is called Stand & hold while a low goodwill, high disparity merger is named Segment & sell. (Lind, 2004)

For each of these four merger types Lind and Stevens recommend a different merger approach. The most straightforward recommendations are given for a Segment & sell merger. This is a type of merger that should never have happened, since the two companies are completely different and the only way to save this merger is to either isolate the acquired company from the rest of the firm into an independent unit or to sell it off.

For Merge and grow type of mergers the recommendations focus on quickly integrating the acquired company into the acquirer and on removing duplication. An example of this type of a merger is when a large company buys a smaller one as a means of growing market share or to expand into a new market. In these types of mergers the people of the acquired company are usually not that pleased with the situation, thus the merger has a very low goodwill.

Service-based mergers typically fall into the Plan & prosper or the Stand & hold category depending on if their technologies, brands, markets and products are similar or not. As these types of mergers are conducted to broaden the services offered to customers or to acquire knowledge of new technologies goodwill is

often quite high. Much of the value of the companies lies in its people and the knowledge they possess, so the merger has to be done carefully not to cause key people to leave the company. Lind and Stevens recommend that mergers of service-based companies should initially be treated as Stand & hold mergers until it is sure that the firms really have a low disparity between them. After that, the key is to make people feel they are in control and let them make some choices regarding their work. Managers should refrain from giving too specific and strict instructions during the merger process.

Bower (Bower, 2001) starts by defining five reasons that can be the driving force behind a merger, and then goes on to give examples of and recommendations for each one of them. The five reasons for mergers according to Bower are: overcapacity, geographic roll-up, product or market extension, R&D, and industry convergence.

The overcapacity M&A occurs in mature industries that tend to be capital intensive, older sectors. The goal of these mergers is to increase the market share of the acquiring company by closing down less effective facilities of the new combined company. According to Bower, few of these mergers are successful because the acquiring company usually retains more of its own operations than that of its target. This leads to a substantial amount of bad-will among the acquired company's people which makes it hard to get mixed teams to work effectively. On these types of mergers Bower only offers one advice: rationalize quickly. The merger won't be easy and will likely be a one-time event.

A geographical roll-up merger is when a company expands geographically by buying a similar company but still lets the operating units remain local. This has the benefits of giving the acquired company better resources while still retaining the local knowledge that it has. Geographical roll-ups are usually beneficial for both parties so they are easier to pull off than overcapacity mergers. The advice given here is to be extremely careful when introducing new

procedures and policies, in these types of mergers the acquirer can afford to go slowly.

The third type mentioned is the product or market extension M&A. These mergers are aimed at extending a company's product line or moving the company into a new country. In these mergers the acquirer has a greater chance of success the bigger it is compared to the target. When doing product or market extension mergers it is very important to know what you are buying as the targets processes can differ greatly from yours.

A merger type common in the high-tech industry is the M&A as R&D. In this industry it is important to get a new product or technology out to the market fast. R&D mergers can be very difficult as the value in the target company often lies in its employees, and if they are not happy with the way the merger is conducted they might leave. This problem is emphasized by the need for speed so the recommendations here are to appoint executives with no other responsibilities to be in charge of the merger.

The last merger type mentioned by Bower is the industry convergence M&A. In these mergers a company bets that it can realize substantial synergies by combining two industries. For these mergers, Bower recommends that subsidiaries should be allowed a high degree of freedom and that businesses should only be integrated when a specific opportunity appears.

Drori et al. performed a case study on a "merger of equals" between two Israeli telecom companies. Their study targets the questions about how and why the participants in a merger of equals "enact, contest, or accept norms and practices of equality". The findings in their study show that advertising a merger as a merger of equals serves as a measure of reducing conflicts and increasing acceptance of the merger among the employees. They also concluded that it is crucial for the new organization to apply a given practice of equality as the employees take note and keep count of actions they see only affecting employees from one of the merged companies. (Drori, 2011)

4 Case Ravensoft and Nordic Solutions

In this chapter I present the two companies of this case study, Ravensoft and Nordic Solutions, along with the relevant data available before and after the merger.

4.1 Company introductions

4.1.1 Ravensoft

Ravensoft was a small software business company that at the time of the merger negotiations had 22 employees. It was founded in 1997 by two partners, and in 1999 a third partner joined the company. From there on the company has grown gradually without any acquisitions. Later on the CEO at that time became a minority shareholder through a stock option program. The CEO left the company before the merger and at the time of the merger only three shareholders remained. Ravensoft was a Microsoft Certified Gold Partner, which means they qualified for the highest level of Microsoft partnership.

Ravensoft had two offices, one in Helsinki, Finland, and one in Manchester, UK. The Manchester office focused on mobile development and was established in 2007. The Helsinki office was Ravensoft's main office and it focused on Microsoft based software development. Ravensoft did project and consulting work for customers which consisted of small and larger companies, but it also had two products of its own: Green Snapper and Battery Extender.

Green Snapper is a power saving application for workstations with which the administrator can set a timeframe for when the computers will be powered on or off. It also features statistics of the computers' uptime and estimated achieved power savings. The other application, Battery Extender, is an application for Symbian phones which controls the different energy consuming components such as the GPS receiver and Bluetooth transmitter and turns them off when they are not used.

4.1.2 Nordic Solutions

Nordic Solutions was a slightly larger company than Ravensoft, with 38 employees at the time of the merger. The company was founded in 2001 by three partners. The first office was in Kuopio, the second office was founded in Helsinki in 2002. In 2004 the ownership structure of the company changed when the largest owner left the company and the other two original partners sold 30% of the company to key employees. At the time of the merger there were a total of 12 partners in Nordic Solutions. The company's main source of revenue came from providing reporting services for customers as well as Oracle E-Business Suite solutions.

Nordic Solutions also had two applications that it sold to customers, Armas and eMemo. eMemo is an application for electronic circulation and approval of general ledger vouchers that integrates directly into the customers' own bookkeeping application, Armas is a solution for change management, automation and centralized reporting of user rights.

4.2 Financial figures

To be able to measure and compare some measurable data related to the merger's performance, I have chosen a few measurements from both companies' income statements. The measurements reflect some of the stated reasons for the merger such as cross selling, overhead costs and increased revenue. Because both companies are software business companies focused on service sales, their cost and revenue structure are quite similar.

(Sums in 1000€)	Nordic Solutions Oy			Ravensoft Oy		
	2008	2009	Growth %	2008	2009	Growth %
Revenue	4453	3703	-16,84 %	1619	2062	27,36 %
Employee Cost	-2284	-2581	13,00 %	-881	-880	-0,11 %
Facilities	-211	-226	7,11 %	-88	-98	11,36 %
External services	-12	0	-100,00 %	-358	-604	68,72 %
Profit/Loss	800	-46	-105,75 %	-23	166	-821,74 %
Employees	32	38	18,75 %	17	17	0,00 %

Table 1, Key financial figures for Nordic Solutions Oy and Ravensoft Oy for 2008-2009

In the year 2008, a year before the merger, Ravensoft's revenue was 1.6 million euros while Nordic Solutions' revenue was about 4.5 million euros. That year Ravensoft made a record loss of 23 thousand euros. For Nordic Solutions 2008 went well and made a record profit of 800 thousand Euros.

The next year the roles were reversed, the merger had already taken place but both companies still functioned as separate companies. The year 2009 turned out to be the worst year ever for Nordic Solutions while it proved to be the best year ever for Ravensoft. Nordic Solutions booked a loss of 46 thousand euros and Ravensoft a profit of 166 thousand euros.

(Sums in 1000€)	Combined				
	2008	2009	Growth % 2008-2009	2010	Growth % 2009-2010
Revenue	6072	5765	-5,06 %	5419	-6,00 %
Employee Cost	-3165	-3461	9,35 %	-3358	-2,98 %
Facilities	-299	-324	8,36 %	-240	-25,93 %
External services	-370	-604	63,24 %	-274	-54,64 %
Profit/Loss	777	120	-84,56 %	58	-51,67 %
Employees	49	55	12,24 %	60	9,09 %

	Growth %		Growth %	
	2011	2010-2011	2012	2011-2012
Revenue	8818	62,72 %	10119	14,75 %
Employee Cost	-4040	20,31 %	-5254	30,05 %
Facilities	N/A		N/A	
External services	-101	-63,14 %	-320	216,83 %
Profit/Loss	1086	1772,41 %	170	-84,35 %
Employees	95	58,33 %	105	10,53 %

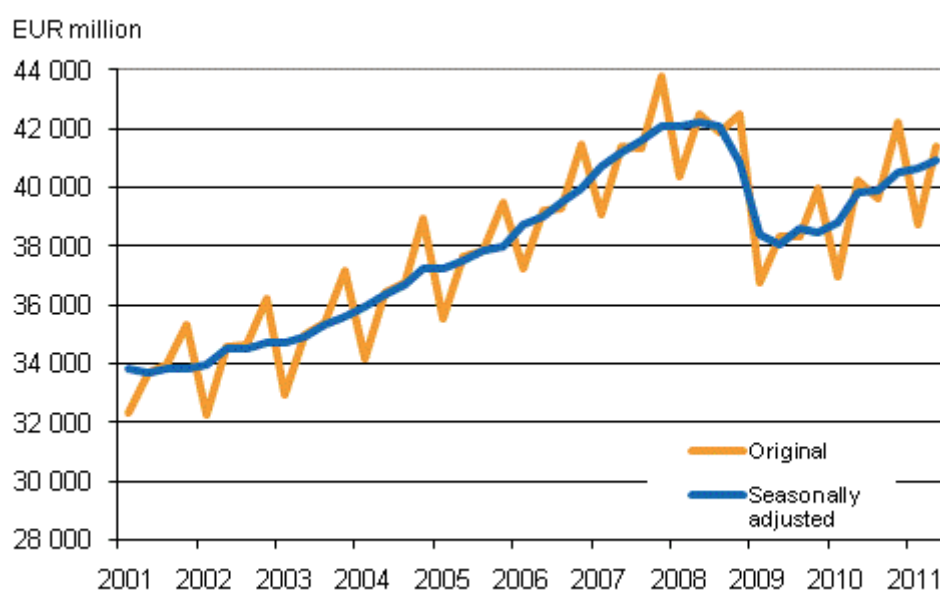
Table 2, Combined key financial figures for Nordic Solutions Oy and Ravensoft Oy for the years 2008-2012

As can be seen in table 2, the combined revenue of the two companies shrunk both in 2009 and in 2010 compared to the previous year. This was attributed to the behavior of the customer companies of Nordic Solutions becoming more careful, and subsequently they bought fewer services from Nordic Solutions. The main reason for the buyers cautiousness was the overall decline of Finland's

economy, measured by GDP, which started in the third quarter of 2009 (Official Statistics of Finland (OSF), 2009). Finland's economy slowly started to grow again in the second quarter of 2010 but had still as of 2011 failed to reach the previous high levels of 2008 (Official Statistics of Finland (OSF), 2011). Although Ravensoft's revenue grew in 2009, a large part of that growth came from work that Nordic Solutions did and was invoiced through Ravensoft. As is shown in table 1 Ravensoft's external services costs increased by 69% in 2009 as a direct result of this. This sum was about 240 k€ and thus inflates the combined revenue with as much.

In 2011, the merged company grew on all measurements; revenue grew by over 60%, profit by 1700% and the amount of employees by 58%. In 2012 the revenue and employee number growth continued, but the profits once again declined.

Nordic Solutions' average cost per employee calculated for the years 2008-2009, was 71,500 euros; whereas Ravensoft's average cost was 51,800 euros. This difference could be attributed to the fact that the employees at Ravensoft were on average younger than at Nordic Solutions, or to a proportionately larger amount of part time workers, but is nonetheless quite substantial. In the years 2009-2010, after the merger, the average cost per employee came down to 59,300 euros. Nordic Solutions later on established offices in Tallinn and Riga. This further brought down the average employee cost to 46,700 euros in the years 2011-2012. I have used a two-year-average as the numbers for a single year can be heavily influenced by recruitments late in the year.



Picture 1, Official Statistics of Finland (OSF), Gross domestic product by quarter at reference year 2000 prices, Available at: http://www.stat.fi/til/ntp/2011/02/ntp_2011_02_2011-09-05_tie_001_en.html, [Accessed on: 24.11.2011]

Both Ravensoft and Nordic Solutions received a large portion of their revenue from only a few customers, and thus were very dependent on these accounts. For Nordic Solutions, the largest customer accounted for about 30 percent of the revenue, while the combined revenue of the five largest customers made up almost 80 percent of the total revenue in 2008. As for Ravensoft, the company had an even more concentrated revenue base with the single largest customer providing about 84 percent of the revenue. With revenue streams so highly concentrated both companies faced a huge risk in case their largest customers would stop buying their services.

	Nordic Solutions Oy	Ravensoft Oy	Combined
	2008	2008	2010
Largest customer	28,38 %	84,00 %	30,37 %
Five largest customers	79,56 %	99,00 %	73,07 %

Table 3, Portion of revenue coming from the largest customer as well as from the five largest customers before and after the merger

5 Evaluation

This chapter reviews the reasons and results of the mergers against the reasons stated by the stakeholders of the companies.

5.1 Merger reasons

From Nordic Solutions point-of-view, there were several reasons for the merger. Before the merger, Nordic Solutions was too small a company to participate in the bidding process for certain public projects where the bidders were required to have a certain amount of turnover (Matsi, 2013a). The acquisition of Ravensoft would boost the company size with about 50 percent which would open new possibilities for Nordic Solutions. This reason is coherent with the monopoly theory by Trautwein, where more market power is desired as a result of the merger.

Another reason, which aligns with the synergy theory, stems from the fact that Nordic Solutions was focused on Oracle technology in their work, but at the same time all of their clients were using Microsoft technology for some part of their IT systems. Ravensoft, on the other hand, had specialized in Microsoft technology so there were apparent synergy effects to gain in the form of cross-selling as well as in being able to provide services for a broader range of the IT system spectrum. (Matsi, 2013a)

Closely related to the synergy theory, (McCann, 1996), found that the acquisition of expert talent is a prevailing reason for mergers in professional service firms. All of the respondents from Nordic Solutions stated that acquiring competence of Microsoft technologies was an important part of the reasons for the merger with Ravensoft. (Matsi, 2013a; Piippo, 2013; Voutilainen, 2013)

Empire building theory, or hubris theory could potentially have influenced the merger decisions, as interviewees have stated that they wanted to grow the value of the company which could be interpreted as a desire to increase their own power (Matsi, 2013b), (Piippo, 2013), (Laurila, 2012). However, the fact

that all of the highest levels of managers in both companies were also the largest shareholders implicates that it is highly unlikely that they would act against the best interests of the shareholders, as they themselves would have had the most to lose in that case.

In the year 2006, Ravensoft had grown into a company with yearly revenue of about 800 thousand euros, and at that time the management, who were at the same time owners, hired a CEO from outside the company in order to get more experience and resources for the management of the company. This decision was also influenced by the fact that all three of the owners had technical backgrounds and not managerial (Rosqvist, 2012). The goal was to grow further and the company also started the development of a product of its own, Green Snapper. After a few years the owners were not satisfied with the results and the CEO left the company. The owners discussed future financing needs with Gearshift Group, a management consulting firm, and realized that a combination of software services and product development in a single firm was a hindrance in getting funding for either part of the company. As the owners felt that they did not have the time or the resources required to further expand Ravensoft on their own, they asked Gearshift Group to search for potential buyers for the professional services part of the company (Laurila, 2012), (Rosqvist, 2012). Initially the owners of Ravensoft had planned to only sell off the professional services business while continuing working on Green Snapper, but they agreed to sell the whole company when Nordic Solutions made an offer to buy the whole company (Laurila, 2012).

5.2 Target selection

Even though the merger was advertised as a merger of equals, in practice Ravensoft Oy was bought by Nordic Solutions Oy. Therefore in this discussion Ravensoft will be attributed the role of target and Nordic Solutions the role of acquirer.

When gauging the selection of Ravensoft as the target for the merger against the findings of Makri et. al., it appears that Ravensoft was a good match for Nordic Solutions. Both companies operated in the software industry, and they mainly did project work for customers. This would imply that they had a high correlation between each other's technological knowledge. According to (Cohen & Levinthal, 1990) a high degree of technological knowledge correlation makes it easier for the acquirer to exploit the target's knowledge. Makri et. al., however, warn against choosing a target that uses too similar technologies as the acquirer as this reduces the acquirers chances to learn from the target. (Makri, 2010)

One of the reasons for Nordic Solutions to choose Ravensoft was that Nordic Solutions wanted to acquire competence in Microsoft technologies (Matsi, 2013a), (Voutilainen, 2013). This was both to be able to do more work for their existing Oracle customers as well as to reduce risk as Nordic Solutions would no longer be dependent on one single technology. Nordic Solutions also specifically searched for a company that worked in the software services field, like themselves, the logic being that it would be easier to integrate a more similar company than a company focusing, for example, solely on developing products (Voutilainen, 2013). As Microsoft and Oracle traditionally have focused on different applications for their technologies there was no significant overlap when acquiring a company that used Microsoft technologies.

While Makri et. al. focused on technological compatibility between acquirer and target, Capron and Shen studied the problem of choosing an acquisition target from the point of a public vs. a private company. While they did find that a company usually makes the best choice possible, they did find that it is advantageous for a company that is buying a firm that operates in the same field as itself to choose a private company rather than a public. (Capron, 2007) In this sense Nordic Solutions made a good choice by acquiring a private company as Ravensoft operated in the same market segment as Nordic Solutions. Acquiring a private company was also, in practice, the only alternative for Nordic Solutions as public companies tend to be much larger, and hence,

more expensive than private ones. Nordic Solutions also found Ravensoft to be of an appropriate size relative to the acquirer, as Ravensoft was roughly half the size of Nordic Solutions. Hence, the buyer thought that the integration of the acquired employees would not be a big problem (Voutilainen, 2013).

5.3 Acquirer selection

After Ravensoft had given Gearshift Group the task of searching for a buyer for Ravensoft, Gearshift Group initially made a long list of about 20 possible companies that were contacted. After contacting these 20 companies the possible buyers were narrowed down to six. Ravensoft's management then met with the management of these companies, signed non-disclosure agreements and presented their company to the possible buyers. From this group of companies, Ravensoft received two offers, and the offers were made public to all of the six companies. Ravensoft chose the offer made by Nordic Solutions due to several reasons. During negotiations the management identified several synergies that could be had if the two companies merged. One was that both companies had different customers so cross-selling to each other's customers could prove valuable; this was further emphasized by the fact that the core competencies of the two companies differed as Nordic Solutions was focused on Oracle technology and Ravensoft on Microsoft technology. These technologies were complementary in the sense that many of Nordic Solutions' customers used Oracle technology to host servers and databases, but still had Microsoft operating systems on the servers and workstations. Another sought after benefit was the larger size of the combined company, as it was thought that this would make the company more appealing both as an employer and as a business partner. The last mentioned synergy effect was the better infrastructure and management of a larger company that would allow a better consultant to management ratio. (Laurila, 2012), (Rosqvist, 2012)

Before Gearshift Group started to search for a buyer, they discussed the possible valuation of Ravensoft with its owners. A commonly used valuation in

these types of transactions is 3-4 times the yearly profit. The owners of Ravensoft also discussed with the potential buyers about how the payment would be done: only cash, only stock or by a combination of both. In the final merger deal with Nordic Solutions a formula based on Ravensoft's revenue and profit was used to determine the price paid, with the owners additionally receiving stock in Nordic Solutions later on. A portion of the payment was tied to Ravensoft's profit for the year 2009, and a smaller portion was dependent on the combined company's revenue 2010. As Ravensoft's owners acquired stock in the acquiring company as part of the deal, and as they wanted to expand the company and further develop their business, it was only natural that they had to evaluate the buying company's business, and not only the offer they gave. (Laurila, 2012), (Rosqvist, 2012)

5.4 Payment

As Fuller et. al showed in their study, the way in which the acquired company is paid for has a very large impact on both the returns to the acquirer as well as on the returns to the target (Fuller, 2002). Even though it can be shown that a specific type of payment is the best decision in a particular case, other factors also affect the decision of whether the payment should be made with cash, stocks, or a combination of both. The acquirer's financial situation and the voting rights of its owners are examples of factors that might influence the type of payment used (Faccio & Masulis, 2005).

In this acquisition, Nordic Solutions decided to use a combination of cash and stock to pay for the acquired firm. This decision was done for several reasons; one was that the owners of Nordic Solutions did not want to pay exclusively with stock, as this would have considerably diluted their own ownership in the company (Voutilainen, 2013). This decision correlates with (Faccio & Masulis, 2005) findings that when the largest shareholder owns between 20% and 60% of the company, they are likely to choose cash over stock as payment in order to not lose control of the company. Nordic Solutions' two largest shareholders

owned 25.5% each of the company, and the third largest owner owned 20% of Nordic Solutions (Matsi, 2013b). The buyers also acknowledged that if you believe that you can improve the target company's business, it is better to not pay exclusively with stocks as you are then sharing your future profits with the sellers.

Nordic Solutions did also not want to pay exclusively with cash, for two different reasons; one was purely financial. Nordic Solutions did not seek debt financing, and thus paying the whole acquisition with cash would have resulted in a weakened financial position which was seen as a too big risk (Voutilainen, 2013). The other reason for paying part of the payment with stocks was that Nordic Solutions wanted to commit the sellers, who also worked as managers in Ravensoft, to their new company (Piippo, 2013), (Voutilainen, 2013). The merger deal also included a clause requiring the three previous owners to work for Nordic Solutions for at least two years after the merger (Laurila, 2012), (Voutilainen, 2013).

As the contract between the sellers and the buyers was classified, I was not able to include the precise amounts of money and stock that were given to the sellers in exchange for their shares in Ravensoft, and thus, I could not estimate if the acquirer overpaid or not. But, according to Matsi, the sellers' asking price was lower and more realistic than those of other small companies that Nordic Solutions had come across. (Matsi, 2013a)

5.5 Merger steps

The merger between Nordic Solutions and Ravensoft can be characterized as a service-based merger, as described by Lind and Stevens (Lind, 2004). These mergers are done to acquire new customers and/or new knowledge. In the case of Nordic Solutions and Ravensoft, both acquiring new customers and acquiring new knowledge were stated reasons for the merger (Matsi, 2013b), (Voutilainen, 2013), (Piippo, 2013). For these kind of mergers, Lind and Stevens recommend that service-based mergers should at first be treated as stand &

hold mergers, and later on as plan & prosper mergers. This means that you should not initially make big changes but rather let the employees get used to the situation before merging teams and relocating employees.

Before the merger deal was made, a due diligence review of the combined company was done, and a business plan for the future was made. These were done together by the management of the two companies based on the assumption that the merger deal would be made. No documented merger plan was made, all the planning of the various merger steps were done more or less informally. (Laurila, 2012), (Matsi, 2013b), (Voutilainen, 2013)

The deal was signed on a Friday, and the employees of the two companies were informed about the coming merger the next Monday. It was emphasized that the goal of the merger was not to reduce costs by making employees redundant. (Laurila, 2012)

The first step in the practical arrangements was co-location. Ravensoft's Helsinki office moved in with Nordic Solutions' Espoo office, within half-a-year after the merger deal. Before that a few people from Ravensoft had already begun working on projects with employees from Nordic Solutions. At this point the employees of the two companies still retained their previous managers even though in some cases this led to a matrix organization; an employee could have both an administrative manager and a manager who managed the employee's daily work.

The second step was moving Ravensoft's employees' computer and mail accounts to Nordic Solution's infrastructure. In conjunction with this all Ravensoft employees salaries started to get paid by Nordic Solutions.

From the beginning of 2010 the company was restructured so that the CEO and the secretaries were employed by Nordic Solutions Oy and all the other employees were employed by Nordic Solutions Consulting Oy (old Ravensoft Oy). Nordic Solutions Oy thus became a holding company that owned 100

percent of the stock in Nordic Solutions Consulting Oy. This was done to minimize the taxes associated with the merger. (Matsi, 2013a)

In 2010, a year after the merger, an employee survey was conducted about the employees' wellbeing at work. The survey contained a few questions about the recent merger. A question asking if employees thought that the merger had been handled well got an average rating of 4.03 on a scale from 1 to 6 with 1 being "I completely disagree" and 6 being "I completely agree", only 4 people out of 34 gave a 1 or a 2. A question stating "I now feel that we all are the same company" got an average of 3.79, but here the spread of the answers was greater. In a free form question of what the employees felt that still had to be done for the merger to be complete the feeling of still belonging to the two original companies was addressed, as there had not been any effort to actively mix the existing teams by moving people around. Overall employee satisfaction was quite good, and it was not mentioned that the merger would have made anything worse. (Tapiola, 2010)

5.6 Merger challenges

When asked about what the challenges were for the merger, the most frequent answer was the challenge of fitting together of two different company cultures; this was mentioned by all the interviewees. Although both companies were fairly young companies and both worked in the software industry, the average employee for the two companies differed quite a lot from each other. Ravensoft had younger employees who were more technically oriented whereas Nordic Solution had somewhat older employees that worked more in consulting roles, and thus had more process knowledge. Employees were referred to as being from Ravensoft or Nordic Solution for quite long, both by other employees as well as by management. Management tried to assign people from both companies to work on the same projects to facilitate integration, but it was complicated due to there being only few similarities in the work done by the

two companies. (Matsi, 2013b), (Rosqvist, 2012), (Laurila, 2012), (Voutilainen, 2013), (Piippo, 2013)

Another challenge mentioned was that it proved difficult to achieve all the perceived benefits of the merger. The most prominent of these was the buyer's hope to use the newly acquired Microsoft expertise to be able to sell more services to the company's existing customers. (Voutilainen, 2013), (Piippo, 2013)

Although it was not mentioned as a challenge to the merger process, both the CEO of Ravensoft and the CEO of Nordic Solutions said that in retrospect, the merger process could have been documented better and executed more according to a plan. The merger was carried out more or less based on the gut feelings of the parties involved and as the process was not documented it was not possible to follow up on how the merger was proceeding. If the process would have been more clearly defined, the benefits of the merger could have been realized earlier. (Laurila, 2012), (Matsi, 2013a)

5.7 Immediate merger results

The merged company had an employee count of 60 immediately after the merger, and it has since continued to grow. The only mentioned goal in terms of numbers was that the company's revenue should be 10% larger in 2010 than that of the combined revenue of the two separate companies in 2009. As can be seen from Table 1, this goal was not met as the amount of revenue decreased in 2010; this decline was seen as an indirect result to the recession in Finland's economy that started in 2009. Due to the decline in revenue and profit, employee co-operation negotiations were held that resulted in a reduction of the number of employees by three. (Matsi, 2010)

Another immediate effect of the merger was that Nordic Solutions was able to sell consultancy work to Ravensoft's largest customer for a total of about 240 thousand euros, thus confirming that the sought after cross-selling synergies

existed. This extra revenue helped Nordic Solutions' result in the year 2009, which would otherwise have been much lower. Another positive effect of the merger was when Ravensoft's largest customer at the time of the merger stopped buying services from Nordic Solutions in 2012 due to a shift in their technology focus. If Ravensoft would have been functioning as an independent company this would have had much more serious consequences than it now had.

In the beginning of 2010, the employees working in the old Ravensoft office moved to the Nordic Solutions office in Espoo, which resulted in savings of 84 thousand euros a year compared to 2009, thus reducing facilities costs by 26%, compared to an increase of 8% the previous year.

5.8 Merger performance

As both the merging companies were privately owned, and the merged company still is, stock based metrics such as CAR cannot be used in evaluating the performance of the merger. Thus, merger performance can only be evaluated by accounting based metrics and subjective assessments.

When looking at the revenue and employee count for the combined companies before the merger (2008) and three years after the merger (2012) it is clear that the value of the company has increased as the revenue has increased by 66% and the number of employees by 114%. While the profits have fluctuated, it is still clear that the criteria that the merger should increase the company valuation (Piippo, 2013) has been fulfilled. The management has not separately calculated what portion of the revenue and profits stem from the acquired business (Piippo, 2013), (Voutilainen, 2013). Thus it is not possible to determine if the merger has increased the earning potential of the business of the old Ravensoft.

As most of the buyers and sellers worked in the merging companies, one can assume that they have very good insight into the actual performance of the

merger, and as such, provide valuable information about it. Both the sellers' and the buyers' were asked about their opinions on how well the merger had been conducted, while focusing on their respective situations.

The interviewed sellers both said that they were pleased with the compensation they got and with the performance of the merged company. According to them, they got a good compensation for the time and effort they had put into building Ravensoft into the company it was at the time of the acquisition. Apart from the compensation the sellers were very pleased with being part of the new company with access to larger projects and with the ability to provide more services to the existing customers. They also thought that the merger brought the stability and benefits of a larger employer to the employees, as well as given them more options for personal development. Laurila also states that he thinks this was a merger in which everyone won. (Laurila, 2012), (Rosqvist, 2012)

The representatives of the former Nordic Solutions also stated that they were pleased with the result of the merger; however, they were less enthusiastic in their wording than the sellers. Phrases like "it didn't go great, but", "we weren't able to take advantage of everything that we had thought" and "the integration didn't happen as quickly as we had hoped" were used when asked about whether the buyer side was satisfied with the acquisition. Of the stated goals for the merger, one in particular did not work out as envisioned; being able to successfully utilize Ravensoft's Microsoft knowledge in selling additional services to Nordic Solutions' existing Oracle clients. According to Voutilanen, Nordic Solutions' owners did not express any dissatisfaction about the acquisition, and he believes the buyer would do the same decision again and that the company acquired very competent employees from Ravensoft. Piippo emphasized that the merger increased the company's revenue and reputation, and brought in new customers. (Matsi, 2013b), (Piippo, 2013), (Voutilainen, 2013)

6 Summary and Conclusion

The objective of this study was to investigate whether merger reasons are the same for small companies in the software business as they are for larger companies, and to evaluate how well merger goals are met in these cases. The study was conducted through a case study by studying the merger of two privately held small companies in the software industry: Nordic Solutions and Ravensoft.

When reviewing the stated reasons for the merger from the acquirer against the facts, it would seem that Nordic Solutions and Ravensoft were a good fit for each other for several reasons.

- Their technologies were similar, but not overlapping, and they functioned as complementary technologies for each other.
- The combined company's product portfolio and service offering was broadened significantly after the merger.
- The companies did not share any customers, so the possibility of cross-selling was apparent, especially as all of Nordic Solutions customers used Microsoft technology in some form.
- With the merger Nordic Solutions acquired experts on Microsoft technology which they would otherwise have had to recruit one-by-one.
- The owners of both companies wanted their company to grow, both for the sake of not letting the company stagnate as well as for being able to compete in bigger tenders, where company size might be a criterion.

Ravensoft's owners, as sellers, did not mention quite as many reasons, but they expressed that they felt they did not have the time or resources to further develop their company and thus wanted to gain the resources and support of a larger company to be able to grow further. They also sought managerial competence and a better company infrastructure from the buyer.

The reasons for this merger aligns very well with the findings of previous studies on mergers and acquisitions, and in this case the predominant reasons were gaining synergy effects in sales, building market power and acquiring new competence. For small and medium size companies in Finland, such as Nordic Solutions and Ravensoft, empire building and hubris of the managers is not an issue as the managers are usually the largest shareholders (Lappalainen, 2012).

As the buyers did not set very specific goals for the merger, it is difficult to say whether these goals were filled or not. The synergy effects from cross selling were initially very positive, but eventually they did not live up to the expectations set for them. Nordic Solutions was not able to sell as much Microsoft consultancy work to their previous customers as they had hoped to. During the first two years, the revenue did not increase as envisioned; however, later on it started to grow again and surpassed the previous numbers. Although cost savings were not mentioned as an independent reason, sought after synergy effects suggest some savings were to be had. Initially there were some savings on facilities costs due to the merging of Ravensoft's Helsinki office with Nordic Solutions' Espoo office. Nordic Solutions' also acquired cheaper employees from Ravensoft based on the average cost per employee.

Subjectively, both the sellers and the buyers stated they were pleased with the merger. The sellers thought that they had been fairly compensated in the deal, and that they now could be a part of a larger company with better potential to grow. The buyers expressed that they got the Microsoft expertise they sought after; they boosted their growth, and had the possibility to compete in bigger tenders.

The merger process was not critically hindered by any major issues, and although the most frequently mentioned challenge was fitting together two cultures, this, in retrospect, did not turn out to be a major issue. According to the employee satisfaction survey, the employees were not dissatisfied with the merger; this was further corroborated by employee turnover not being higher than usual after the merger. The obvious worst case scenario would have been

many employees leaving the company, which would have had a severe negative effect on the merger results.

While both the buyers and the sellers were satisfied with the merger, both parties were, in retrospect, of the opinion that the merger should have been planned better, with tasks for what needed to be done assigned to individual people. Clearer, more measurable goals should also have been set up so that that could have been followed up on so that corrective measures could have been taken if needed.

In conclusion I think that the initial setting could have provided for a very successful merger, but that a significant part of the potential was lost because of poor merger execution planning. Overall I would still say that the merger was a success, as all of the parties involved were satisfied, the company has since grown significantly, and no large portion of the employees left the company after the merger.

7 References

Agrawal, A., & Jaffe, J. F. (2000). The post-merger performance puzzle. *Advances in Mergers and Acquisitions*, 1, 7-41.

Ahonen, J. J. (2006). Three case-studies on common software process problems in software company acquisitions. *SOFTWARE PROCESS IMPROVEMENT, PROCEEDINGS*, 4257, 62-73.

Bauguess, S. W. (2009). Ownership structure and target returns. *JOURNAL OF CORPORATE FINANCE*, 15(1), 48-65.

Berkovitch, E., & Narayanan, M. P. (1993). Motives for takeovers: An empirical investigation. *The Journal of Financial and Quantitative Analysis*, 28(3), 347-362.

Bhagat, S. (2005). Do tender offers create value? new methods and evidence. *Journal of Financial Economics*, 76(1), 3-60.

Bower, J. L. (2001). Not all M&As are alike--and that matters. *Harvard Business Review*, 79(3), 92-101.

Bryman, A. (2007). In Bell E. (Ed.), *Business research methods*. Oxford: Oxford University Press.

Campa, J. M. (2006). M&As performance in the european financial industry. *JOURNAL OF BANKING & FINANCE*, 30(12), 3367-3392.

Capron, L. (2007). Acquisitions of private vs. public firms: Private information, target selection, and acquirer returns. *Strategic Management Journal*, 28(9), 891-911.

Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and inno. *Administrative Science Quarterly*, 35(1), 128.

Drori, I. (2011). Cultural clashes in a "merger of equals": The case of high-tech start-ups.(case study). *Human Resource Management, Sept-Oct, 2011, Vol.50(5), P.625-649, 50(5), 625-649; Oct,.*

Epstein, M. J. (2004). The drivers of success in post-merger integration. *Organizational Dynamics*, 33(2), 174-189.

Faccio, M., & Masulis, R. W. (2005). The choice of payment method in european mergers and acquisitions. *The Journal of Finance*, 60(3), 1345-1388.

Franks, J. (1991). THE POSTMERGER SHARE-PRICE PERFORMANCE OF ACQUIRING FIRMS. *Journal of Financial Economics*, 29(1), 81-96.

Fuller, K. (2002). What do returns to acquiring firms tell us? evidence from firms that make many acquisitions. *Journal of Finance*, 57(4), 1763-1793.

Galpin, T. (2008). From the deal world to the real world: Maximizing M&A value after the deal is done.9(2), 57-64.

Gillham, B. (2000a). In ebrary I. (Ed.), *Case study research methods /*. London ;: Continuum.

Gillham, B. (2000b). *The research interview*. London: Continuum.

Gillham, B. (2008). *Developing a questionnaire*. London: Continuum.

Hitt, M., Harrison, J., Ireland, R. D., & Best, A. (1998). Attributes of successful and unsuccessful acquisitions of US firms. *British Journal of Management*, 9(2), 91.

Kreitl, G., & J.Oberndorfer, W. (2004). Motives for acquisitions among engineering consulting firms. *Construction Management and Economics*, 22(7), 691.

Lappalainen, J. (2012). Financial performance of SMEs: Impact of ownership structure and board composition. *Management Research Review*, 35(11), 1088-1108.

Laurila, J. (2012). *Interview with Jari Laurila, 17.12.2012*. Espoo, Finland:

Leger, P. M. (2009). Post-merger performance in the software industry: The impact of characteristics of the software product portfolio. *Technovation*, 29(10), 704-713.

Lind, B. (2004). Match your merger integration strategy and leadership style to your merger type. *Strategy & Leadership*, 32(4), 10-16Strategy.

Lubatkin, M. (1987). MERGER STRATEGIES AND STOCKHOLDER VALUE. *Strategic Management Journal*, 8(1), 39-53.

Makri, M. (2010). COMPLEMENTARY TECHNOLOGIES, KNOWLEDGE RELATEDNESS, AND INVENTION OUTCOMES IN HIGH TECHNOLOGY MERGERS AND ACQUISITIONS. *Strategic Management Journal*, 31(6), 602-628.

Matsi, P. (2010). *Nordic solutions year 2009 results and economic outlook for year 2010*. Unpublished manuscript.

Matsi, P. (2013a). *Interview with Pasi Matsi, 07.05.2013*. Espoo, Finland:

Matsi, P. (2013b). *Personnal communication 1.3.2013*

McCann, J. E. (1996). The growth of acquisitions in services. *Long Range Planning*, 29(6), 835-841.

Official Statistics of Finland (OSF). (2009). Quarterly national accounts [e-publication].
ISSN=1797-9765. 4th quarter 2008. Retrieved from http://www.stat.fi/til/ntp/2008/04/ntp_2008_04_2009-02-27_tie_001_en.html

Official Statistics of Finland (OSF). (2011). Quarterly national accounts [e-publication].
ISSN=1797-9765. 2nd quarter 2011. Retrieved from http://www.stat.fi/til/ntp/2011/02/ntp_2011_02_2011-09-05_tie_001_en.html

Papadakis, V. M. (2010). Measuring the performance of acquisitions: An empirical investigation using multiple criteria V. M. papadakis and I. C. thanos measuring the performance of acquisitions. *British Journal of Management*, 21(4), 859-873.

Piippo, A. (2013). *Interview with Antti Piippo. 22.04.2013*. Helsinki, Finland:

Rosqvist, P. (2012). *Interview with Patrik Rosqvist, 14.12.2012*. Espoo, Finland:

Schoenberg, R. (2006). Measuring the performance of corporate acquisitions: An empirical comparison of alternative metrics. *British Journal of Management*, 17(4), 361-370.

Stake, R. E. (1995). *The art of case study research*. Thousand Oaks (CA): SAGE.

Tapiola. (2010). *Employee satisfactory survey, nordic solutions*

Trautwein, F. (1990). MERGER MOTIVES AND MERGER PRESCRIPTIONS. *Strategic Management Journal*, 11(4), 283-295.

Voutilainen, M. (2013). *Interview with Marko Voutilainen, 14.03.2013*. Espoo, Finland:

8 Appendices

8.1 Appendix 1, Interview guide for Nordic Solutions owners

8.1.1 Yhdistymisestä

- Etsikö NS ostettavaa
- Miksi haluttiin ostaa Ravensoft
- Mitkä olivat tavoitteet
- Miten arvioitiin kannattavuus
- Miten määritettiin hinta
- Miten osto rahoitettiin
- Miten osto maksettiin
- Oliko ehtoja ostossa
- Milloin osto tehtiin
- Oliko päätös yksimielinen
- Missä roolissa toimit yhdistymisessä
- Miten yhdistymistä valmisteltiin
- Miten yhdistymistä suunniteltiin
- Miksi kaksi yhtiötä, Nordic Solutions Oy ja Nordic Solutions Consulting Oy

8.1.2 Yhdistymisen jälkeen

- Täyttyivätkö tavoitteet
- Mitkä olivat suurimmat haasteet
- Olitteko tyytyväinen tulokseen
- Onko asioita joihin ette olleet tyytyväisiä

8.2 Appendix 2, Interview guide for Ravensoft owners

8.2.1 Yhdistymisestä

- Miksi haluttiin myydä Ravensoft
- Etsikö Ravensoft ostajaa
- Miten määritettiin hinta
- Mitkä olivat tavoitteet
- Oliko ehtoja myynnissä
- Oliko päätös yksimielinen
- Miten yhdistymistä valmisteltiin
- Miten yhdistymistä suunniteltiin
- Missä roolissa toimit yhdistymisessä

8.2.2 Yhdistymisen jälkeen

- Täyttyivätkö tavoitteet
- Mitkä olivat suurimmat haasteet
- Olitteko tyytyväinen tulokseen